

Operating Instructions

Light-metal Ex d enclosures / flameproof enclosure

- > 8265/0 Empty enclosure
- > 8265/4 Control panel, integrated in Ex e enclosure
- > 8265/5 Control panel



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2 General Information

2.1 Manufacturer

R. STAHL Schaltgeräte GmbH Am Bahnhof 30 D-74638 Waldenburg

Phone: +49 7942 943-0 Fax: +49 7942 943-4333 Internet: www.stahl-ex.com

2.2 Information Regarding the Operating Instructions

ID NO.: 143457 / 826560300010 Publication Code: 2010-04-26·BA00·III·en·02 We reserve the right to make technical changes without notice.

2.3 Symbols used

	Action request:
	Describes actions to be carried out by the user.
\triangleright	Reaction sign:
	Describes the results or the reactions to the actions taken.
Х	Bullet
(B)	Sentinel:
	Describes the notes and recommendations.
A	Warning sign; danger from energised parts!
EX	Warning sign: Danger due to an explosive atmosphere!



3 General safety instructions

3.1 Safety Instructions for Assembly and Operating Personnel

The operating instructions contain basic safety instructions to be observed during installation, operation and maintenance. Non-observance will endanger persons, plant and the environment.

⚠ WARNING

Danger due to unauthorised work being performed on the device!

- ▶ Mounting, installation, commissioning, operation and maintenance must only be performed by personnel who are both authorised and suitably trained for this purpose.

Before assembly/commissioning:

- Read through the operating instructions.
- Give adequate training to the assembly and operating personnel.
- ► Ensure that the contents of the operating instructions are fully understood by the personnel in charge.
- ▶ The national installation and assembly regulations (e.g. IEC/EN 60079-14) apply.

If you have questions:

Contact the manufacturer.

When operating the device:

- Ensure the operating instructions are made available on location at all times.
- Observe safety instructions.
- ▶ Observe national safety and accident prevention regulations.
- Only run the device according to its performance data.
- ▶ Maintenance or repair work not described in the operating instructions must not be performed without prior agreement with the manufacturer.
- Any damage may compromise the explosion protection.
- No changes may be made to the devices or their components that compromise explosion protection.
- Install and use the device only if it is undamaged, dry and clean.

3.2 Warnings

Warnings are sub-divided in these operating instructions according to the following scheme:

⚠ WARNING

Type and source of danger.

- Measures to avoid danger.

They are always identified by the signalling word "WARNING" and sometimes also have a symbol which is specific to the danger involved.



3.3 Conformity to Standards

The Ex d enclosures in light metal comply with the following regulations and standards:

- X Directive 94/9/EC
- X EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-11, EN 61241-0, EN 61241-1
- X IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-11, IEC 61241-0, IEC 61241-1

4 Designated Use

The enclosures are used to build motor starters, control stations and terminal boxes. They are suitable for being mounted in measuring equipment and customer-specific control panels.

This technology allows using sparking and arcing equipment in zones 1 and 2. The built-in components are standard electrical and switching devices, being designed and wired according to customer specifications.

The enclosure units can be installed as components in Ex e control systems. A typical application is as circuit breakers for motor protection in light and heating circuits.

Covers with inspection windows, O-rings for guaranteeing type of protection IP66 as well as mounting plates and simple DIN rails are available as accessories.

Flameproof cable glands for directly introducing the cable into the enclosure or threaded holes for conduit connection are possible. For indirect cable entry, however, enclosures with terminal compartments of "Increased safety" of the series 8146 and 8125 are used.

⚠ WARNING

Only use the device for its intended purpose!

- Otherwise, the manufacturer's liability and warranty expire.
- Only use the device under the operating conditions described in the operating instructions.
- ▶ The device must only be used in areas subject to explosion hazards according to these operating instructions.



Technical data 5

Series 8265 Version

Explosion protection

Gas explosion protection

ATEX

IECEx 8265/0: Ex d IIC

8265/4: Ex de ia/ib [ia/ib] IIC 8265/5: Ex de ia/ib [ia/ib] IIC T4 ... T6

Dust explosion protection

ATEX

To depends on the installed electrical equipment.

IECEx 8265/0: Ex td A21 IP66 T*

8265/5: Ex td A21 IP66 T*

* To depends on the installed electrical equipment.

Certificates

8265/0: PTB 06 ATEX 1023 U **ATEX**

8265/4: PTB 06 ATEX 1076 U 8265/5: PTB 06 ATEX 1077

IECEx 8265/0: IECEx PTB 07.0027 U

8265/4: IECEx PTB 07.0028 U 8265/5: IECEx PTB 07.0029

Germanischer Lloyd 8265/0: 58 963-08 HH

Rated cross section Enclosure Cross section

> Size 2 max. 95 mm²

Size 3 Size 4

Size 6 max. 120 mm²

Rated operational voltage Ue 1000 V Standard:

> Special: 10 kV - depending on the cable entries or bushing used or of the

equipment built in in each case.

Rated operational current Ie Enclosure Current

> Size 2 max. 160 A

Size 3

Size 4

Size 6 max. 250 A

Please refer to the individual type and rating plates of the devices!

Type of protection

IP66 (with additional O-ring)

Copper-free aluminium (saltwater-resistant) Enclosure

Upon direct contact with seawater, a coating is recommended.



Power dissipation and temperature class

8265/5 controller IEC:

Enclosure	for ambient temperature 40 °C				
	Т6	T5			
Size 2	30 W	45 W			
Size 3	43 W	63 W			
Size 4	62 W	93 W			
Size 6	147 W	217 W			
	for ambient temperature 55°C				
	Т6	T5			
Size 2	18 W	30 W			
Size 3	26 W	43 W			
Size 4	35 W	62 W			

8265/4 controller IEC, installed in Ex e enclosure:

Enclosure	for ambient temperature 40 °C				
	T6	T5			
Size 2	27 W	39 W			
Size 3	32 W	47 W			
	for ambient temperature 55°C				
	for ambient tempe	rature 55°C			
	for ambient tempe	rature 55°C			
Size 2	•				

Max. number of holes

Max. number of metrical holes at each side

Enclosure	M 20	M 25	M 32	M 40	M 50	M 63	M 75	M 90	M 105
Size 2	3	2	2	1					
Size 3	8	4	3	2	1	1	1		
Size 4	16	9	6	4	3	1	1		
Size 6	28	16	11	8	5	3	2	1	1

Max. number of conduit holes Max. number of conduit holes

Enclosure	1/4"	3/8"	1/2"	3/4"	1"	1 ¹ / ₄ "	1 ¹ / ₂ "	2"	2 1/2"	3"
Size 2	8	8	4	3	2	2	1	-		
Size 3	16	16	9	6	5	3	2	1		
Size 4	36	36	18	16	9	6	5	3		
Size 6	68	63	39	28	20	12	8	6	4	2

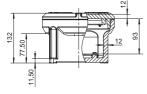


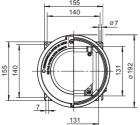
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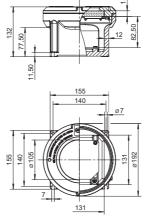
Dimensional drawings (all dimensions in mm) - subject to alterations

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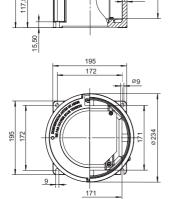


Enclosure size 2

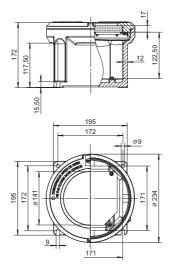


Enclosure size 2 8265/.2-001, with inspection window



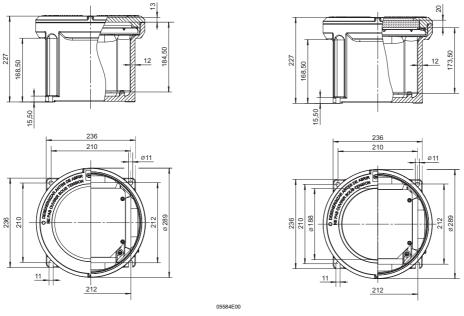


Enclosure size 3 8265/.3-000, without inspection window



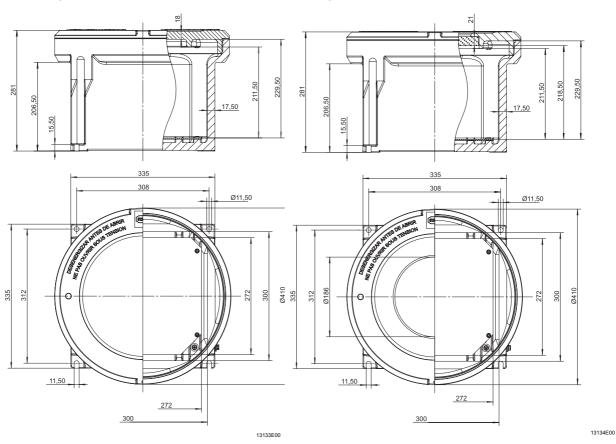
Enclosure size 3 8265/.3-001, with inspection window

Dimensional drawings (all dimensions in mm) - subject to alterations



Enclosure size 4 8265/.4-000, without inspection window

Enclosure size 4 8265/.4-001, with inspection window



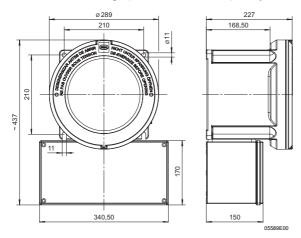
Enclosure size 6 8265/.6-000, without inspection window

Enclosure size 6 8265/.6-001, with inspection window



05588E00

Dimensional drawings (all dimensions in mm) - subject to alterations



Enclosure size 4 8265/.4-000, with terminal compartment 8146/.S7.

6 Transport, Storage and Disposal

Transport

Shock-free in its original carton, do not drop, handle carefully.

Storage

Store in a dry place in its original packaging

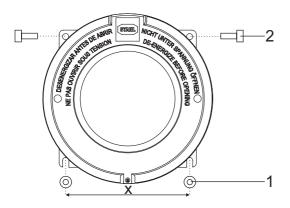
Disposal

Ensure environmentally friendly disposal of all components according to legal regulations.

7 Assembly



Install a protective roof or wall if the explosion-protected electrical device is mounted outdoors.



05997E0

- ▶ Place the Ex d enclosure onto two screws (distance "x" see dimensional drawings).
- ▶ Fasten the Ex d enclosure by means of two further screws.
- ▶ Tighten all screws.



Ex e terminal compartment:



To prevent condensation in the terminal compartment, we recommend using a type 8162 breather from R. STAHL Schaltgeräte GmbH. The installation of the breather reduces the type of protection as per IEC 60529.

If installed vertically, breather at the bottom, the type of protection is IP66, otherwise IP54.

⚠ WARNING



Danger due to not approved cable entries!

- ▷ If a not approved cable entry is used, explosion protection can no longer be guaranteed.
- Use only cable entries approved for the required type of protection.

⚠ WARNING



Danger due to open holes or unused cable entries on the Ex e enclosure!

- The explosion protection can no longer be guaranteed if holes or unused cable entries of the Ex e enclosure are left open.
- Close open holes using stopping plugs certified in accordance with Directive 94/9/EC (e.g. type 8290) and unused cable entries using plugs certified in accordance with Directive 94/9/EC (e.g. type 8161).

8 Installation

⚠ WARNING

Installation may only be performed by qualified personnel!

- Installation of the devices may only be carried out by appropriately authorised and trained personnel.
- Observe the relevant national regulations in the country of use.

↑ WARNING



Incorrectly installed components!

- Explosion protection cannot be guaranteed any more if the components are incorrectly installed.
- ▶ When terminal sleeves are fitted, they must be gas-tight and applied with a suitable tool.

↑ WARNING



Use of cable entries without strain-relief!

- Explosion protection cannot be guaranteed any more if cable entries are installed without cable strain-relief in the vicinity of loosely laid cables and leads
- Securely lay cabling and leads.
- ▶ If the cables are laid loosely, only use cable entries approved for this application.

⚠ WARNING

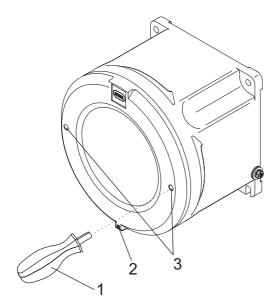


Danger due to damaged threads!

- ▷ If threads are damaged, the spark protection gap can no longer be guaranteed.
- Handle and fit the cover with care.
- ▶ Replace a cover or enclosure with damaged threads immediately!



Opening/closing the enclosure cover



negaenn

- Loosen the grub screw (2).
- ▶ Insert the key (1) into the hole (3) and unscrew the cover.
- ▶ Place the enclosure cover carefully to one side.
- ▶ For closing the cover, proceed in reverse order.

Mains Connection

- ▶ Be especially careful when connecting the cable.
- ▶ The conductor insulation must reach to the terminal.
- ▶ The conductor itself must not be damaged when removing the insulation.
- Select the cables and the mode of running them in a way that the maximum permitted cable temperature is not exceeded.
- ▶ Observe the terminal specifications (see technical data).

8.1 Internal wiring

Cables

► For internal wiring, use only type of wires specified in the table.

Temperature classes with different wire types

Type	Temperature class	Wire size
H 05 V 2	T 6	
H 07 G	T 5	≥ 1.0 mm ² , Cu
or similar types		



MARNING

Incorrectly routed cables in the Ex e terminal compartment!

- Explosion protection cannot be guaranteed any more if the wires are routed incorrectly.
- Strictly adhere to the required creepage distances and clearances.
- Mounting rails or elements must be loosened correctly.
- Mounting rails or elements must be fastened properly.

Intrinsically safe circuits

↑ WARNING



Danger due to incorrectly dimensioned cables and wires!

- Risk of severe injuries.
- ▶ Use only insulated cables and wires whose testing voltage is AC 500V and whose minimum quality is H05.
- ▶ The diameter of one conductor must not be smaller than 0.1 mm.
- ► The diameter of individual wires of finely stranded conductors must not be smaller than 0.1 mm.

Insulation test voltage

With regard to the insulation and separation of terminals and cables, it should be noted that the insulation test voltage is derived from the sum of the rated operating voltages of intrinsically safe circuits.

"Intrinsically safe against earth"

In case of "intrinsically safe against earth" then the insulation voltage value is at least 500 V (or double the value of the intrinsically safe circuit rated operational voltage).

"Intrinsically safe against non intrinsically safe"

In case of "intrinsically safe against non-intrinsically safe", then the insulation voltage value is at least 1500 V (double the sum of the rated operational voltage of intrinsically-safe circuits plus 1000 V).

⚠ WARNING



Danger due to incorrectly routed cables and wires!

- Risk of short circuit.
- ▶ Wires and cables must be at a minimum distance of 8 mm to wires and cables of other intrinsically safe circuits. Exception: The cores of intrinsically safe or non-intrinsically safe circuits are protected by an earthed shield.



A distance of 50 mm around an insulating (\geq 1 mm thick) or earthed metal (\geq 0.45 mm thick) isolating plate must be provided between the connection points of intrinsically safe and non-intrinsically safe circuits.

An isolating plate at a distance of \leq 1.5 mm to the enclosure wall must be provided between the connection points of intrinsically safe and non-intrinsically safe circuits.

Terminal blocks in Ex e terminal compartment



Pay attention to the test certificate of the terminals.

Only one conductor may be connected to each terminal. Terminal bridging is only permitted if original I.S. accessories have been used.

Equip with the necessary partitions as needed.

For additional protection against splaying use crimped wire-end sleeves or cable lugs.

The cross section of the splay protection must meet the conductor cross section.



8.2 External wiring

Lead the connecting wires with intact external insulation jackets through the cable entries into the terminal compartment.

Please ensure that the cable diameter and the terminal cross section on the cable entry are identical.

Tighten the hexagon nut of the cable entry so that the sealing of the terminal compartment as well as the strain relief at the connection point are guaranteed. To determine the tightening torques, please consult the operating instructions of the individual components.

Lay the connecting wires in the terminal compartment so that:

- ▶ The minimum permissible bending radii for the respective conductor cross section are achieved.
- No mechanical damage to the conductor isolation rubbing against sharp-edged metal parts result.

↑ WARNING



Incorrect installation!

- ▶ Please observe the thread sizes for the cable glands specified in the equipment documentation.
- ➤ The connecting cable should comply with relevant regulations and have the required cross-section. The diameter must be identical to the data on the cable entry.
- ► Ensure that the maximum permissible conductor temperatures are not exceeded by suitable selection of cables and means of running them.
- ➤ The permissible ambient temperature around the intrinsically safe units and components must not be exceeded.
- ▶ When stripping insulation, it must be ensured that the conductor insulation reaches right up to the terminals.
- ▶ The conductor itself must not be damaged when removing the insulation.
- ➤ The switching device combination must only be installed in a dry and clean environment.

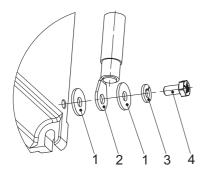
Terminals

Tighten the screws of the connection terminals in accordance with the specified tightening torques.

Screw dimensions	M 3	M 4	M 5	M 6	M 8	M 10
Tightening torque [Nm]	0.8	2.0	3.5	5.0	10.0	17.0



Protective earth conductor



05592E00

- ➤ The protective earth conductor must always be connected to the enclosure using a cable lug (2). Place a washer (1) above and below the cable lug and secure the screw (4) using a locking device (3).
- ▶ Regardless of the operating voltage, connect all bare, non-energised metal parts to the protective system.
- ▶ The external protective earth conductor is designed to be fitted with a cable lug. The cable must be run and fixed near to the enclosure to prevent movement of the cable.

Connecting to the mains

- Open the enclosure.
- ▶ Lead the connecting wires with intact external insulation jackets through the cable entry into the terminal compartment.
- Lay the connecting wires in the terminal compartment so that the minimum permissible bending radii are achieved.
- ▶ The protective earth conductor must always be connected.
- ▶ Remove loose metal particles, dirt and traces of moisture from the terminal compartment, if any.
- Carefully close the enclosure after finishing the work.
- ▶ Test the isolation according to EN 60439-1.



Please take the details relating to potential equalisation, earthing and intrinsically safe circuits from the documentation of the relevant equipment.

9 Putting into operation

Before commissioning

- ▶ Make sure that the device is not damaged.
- ▶ Make sure that the device is installed correctly.
- ▶ Remove any foreign object from the device and clean the terminal compartment.
- ► Check that cable entries and stopping plugs are tight.
- Check that screws and nuts are tightly fitted.
- Inspect cable glands for damage.
- Control torques.
- ▶ Make sure that unused cable entries are sealed with plugs certified according to Directive 94/9/EC, and unused holes are sealed by stopping plugs certified according to Directive 94/9/EC.



10 Maintenance

⚠ WARNING



Danger from energised parts!

- Risk of severe injuries.
- Before any maintenance work commences, disconnect the device from the power supply.
- Secure the device against unauthorised activation.

⚠ WARNING

Risk due to unauthorised work being performed on the device!

- Assembly, installation, commissioning and servicing work must only be performed by personnel who are both authorised and suitably trained for this purpose.

⚠ WARNING



Short-circuit in the circuit

- After multiple short circuits, the flameproof encapsulation is no longer guaranteed.
- After a short circuit, check the functionality of the device.
- Replace the entire device if needed.

10.1 Regular Maintenance Work

- ➤ Consult the relevant regulations (e.g. IEC/EN 60079-17) to determine the type and extent of inspections.
- ▶ Plan the intervals so that any defects in the equipment which may be anticipated are promptly detected.

To check as part of the maintenance schedule:

- X Check if the cables are clamped properly.
- X Inspect the device for signs of visible damage.
- X Compliance with the permitted temperatures in accordance with IEC/EN 60079-0.
- X Make sure that the device is used according to its designated use

10.2 Cleaning

X Clean with a cloth, brush, vacuum cleaner or similar items.



11 Accessories and Spare Parts

Designation	Illustration			Order number	Weight kg
Cover with inspection window		for enclosure: Visible part of window	Size 2 Ø 105 mm	143451	1.525
		for enclosure: Visible part of window	Size 3 Ø 141 mm	143452	2.232
		for enclosure: Visible part of window	Size 4 Ø 186 mm	143453	3.856
		for enclosure: Visible part of window	Size 6 Ø 186 mm	201886	8.369
Mounting plate	0	for enclosure size 2		143484	0.189
	$\mathbb{L}/$	for enclosure size 3		143485	0.364
		for enclosure size 4		143486	0.744
		for enclosure size 6		143488	1.700
O-ring		for enclosure size 2		111816	0.008
		for enclosure size 3		111817	0.010
		for enclosure size 4		111818	0.012
		for enclosure size 6		201341	0.026
Drain and breather valve		with thread ³ / ₈ "		107998	0.026
14.10		with thread ¹ / ₂ "		107999	0.090
Mounting rail		TS15 for enclosure size 2		143497	0.018
		TS35 for enclosure size 2		143498	0.037
		TS15 for enclosure size 3		137902	0.020
		TS35 for enclosure size 3		137970	0.040
		G32 for enclosure size 3		137939	0.020
		TS15 for enclosure size 4		137908	0.029
		TS35 for enclosure size 4		137976	0.060
		G32 for enclosure size 4		137945	0.130
		TS15 for enclosure size 6		166448	0.049
		TS35 for enclosure size 6		166449	0.100
		G32 for enclosure size 6		166450	0.200



Designation	Illustration	Order number	Weight
			kg
Grub screw	M5x16-A2 with Allen screw and point	110216	0.001
Key	to open the enclosure cover for size 2, 3, 4	142059	0.060
Adjustable wrench	to open the enclosure cover for size 6	107040	0.108

⚠ WARNING

Use of non-approved accessories and spare parts.

- ▶ Use only original accessories and original spare parts manufactured by R. STAHL.



(6)

Address:

12 Prototype test certificate (Page 1)

Physikalisch-Technische Bundesanstalt



Braunschweig und Berlin



(1) EC-TYPE-EXAMINATION CERTIFICATE

(Translation)

- (2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres - Directive 94/9/EC
- (3) EC-type-examination Certificate Number:



(4) Component: Empty enclosure, type 8265/..-...

(5) Manufacturer: R. STAHL Schaltgeräte GmbH

(7) This component and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to

74638 Waldenburg/Württ., Germany

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report PTB Ex 07-16299.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0: 2004 EN 60079-1: 2004 EN 60079-7: 2003 EN 61241-0: 2004 EN 61241-1: 2004

- (10) The sign "U" placed behind the certificate number indicates that this certificate should not be confounded with certificates issued for equipment or protective systems. This Component Certificate only serves as a basis for the issuing of certificates for equipment or protective systems.
- (11) This EC-type-examination Certificate relates only to the design, examination and tests of the specified component in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.
- (12) The marking of the component shall include the following:

II 2 G Ex de II C
II 2 D Ex tD A21 IP 66

Zertifizierun By order:

Dr.-Ing. M/. T Oberregierur Braunschweig, March 30, 2007

sheet 1/3

EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt.

In case of dispute, the German text shall prevail.

Physikalisch-Technische Bundesanstalt • Bundesallee 100 • D-38116 Braunschweig



Physikalisch-Technische Bundesanstalt



Braunschweig und Berlin



EC-TYPE-EXAMINATION CERTIFICATE (1)

(Translation)

Equipment and Protective Systems Intended for Use in (2)Potentially Explosive Atmospheres - Directive 94/9/EC

EC-type-examination Certificate Number: (3)

PTB 06 ATEX 1076 U

(4)Component: Control unit, type 8265/4.-...

Manufacturer:

R. STAHL Schaltgeräte GmbH

(6)Address: 74638 Waldenburg/Württ., Germany

- This component and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report PTB Ex 07-16392.

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0: 2004

EN 60079-1: 2004 EN 60079-7: 2003

EN 60079-11:1999

- (10) The sign "U" placed behind the certificate number indicates that this certificate should not be confounded with certificates issued for equipment or protective systems. This Component Certificate only serves as a basis for the issuing of certificates for equipment or protective systems.
- (11) This EC-type-examination Certificate relates only to the design, examination and tests of the specified component in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.
- (12) The marking of the component shall include the following:

Il 2 G Ex de[ia/ib] IIC

Zerţifizierungsstelle Explosionsschutz

Braunschweig, March 30, 2007



sheet 1/3

EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

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Physikalisch-Technische Bundesanstalt



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(1) EC-TYPE-EXAMINATION CERTIFICATE

(Translation)

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres - Directive 94/9/EC

(3) EC-type-examination Certificate Number:



PTB 06 ATEX 1077

(4) Equipment:

Control unit, type 8265/5.-...

(5) Manufacturer:

R. STAHL Schaltgeräte GmbH

(6) Address:

- 74638 Waldenburg/Württ., Germany
- (7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report PTB Ex 07-16393.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0: 2004 EN 60079-11:1999 EN 60079-1: 2004 EN 61241-0: 2004 EN 60079-7: 2003 EN 61241-1: 2004

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EC-type-examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.
- (12) The marking of the equipment shall include the following:

(Ex) II 2 G Ex de[ia/ib] IIC T6, T5 and T4

II 2 D Ex tD A21 IP 66 T 80 °C, 95 °C and 130 °C

Zertifizi unissiselle Explosionsschutz By Braunschweig, March 30, 2007

sheet 1/3

EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt.

In case of dispute, the German text shall prevail.

Physikalisch-Technische Bundesanstalt • Bundesallee 100 • D-38116 Braunschweig



EG-Konformitätserklärung

EC-Declaration of Conformity CE-Déclaration de Conformité



Wir (we; nous)

R. STAHL Schaltgeräte GmbH, Am Bahnhof 30, D-74638 Waldenburg

8265/0.-...

erklären in alleiniger Verantwortung, dass das Produkt

hereby declare in our sole responsibility, that the product déclarons de notre seule responsabilité, que le produit Leergehäuse

Flameproof enclosure Enveloppe antidéflagrante

mit der EG-Baumusterprüfbescheinigung:

(under; EC-Type Examination Certificate: avec) Attestation d'examen CE de type:

PTB 06 ATEX 1023 U

auf das sich diese Erklärung bezieht, mit der/den folgenden Norm(en) oder normativen Dokumenten übereinstimmt

which is the subject of this declaration, is in conformity with the following standard(s) or normative documents

auquel cette déclaration se rapporte, est conforme aux normes ou aux documents normatifs suivants

Bestimmungen der Richtlinie
terms of the directive
prescription de la directive

Titel und/oder Nr. sowie Ausgabedatum der Norm
title and/or No. and date of issue of the standard
titre et/ou No. ainsi que date d'émission des normes

94/9/EG: Geräte und Schutzsysteme zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen

94/9/EC: Equipment and protective systems intended for use in potentially explosive atmospheres

94/9/CE: Appareils et systèmes de protection destinés à être utilisés en atmosphères explosibles

EN 60079-0:2004

EN 60079-1:2004

EN 60079-7:2003

EN 61241-0:2004

EN 61241-1:2004

89/336/EWG:

Elektromagnetische Verträglichkeit

89/336/EEC: Electromagnetic compatibility 89/336/CEE: Compatibilité électromagnétique

Qualitätssicherung Produktion:

Production Quality Assessment: Assurance Qualitée Production: PTB 96 ATEX Q006-4

Kenn-Nr. der benannten Stelle / Notified Body number / N° de l'organisme de certification: 0102

Waldenburg, 14.05.2007

Ort und Datum Place and date lieu et date B. Limbacher Leiter Entwicklung Head of Development Directeur Développement

i.V.

Dr. S. Jung

Leiter Qualitätsmanagement
Director Quality Management Dept.
Directeur Dept. Assurance de Qualité

XV 03/99 Papier chlorfn



EG-Konformitätserklärung

EC-Declaration of Conformity CE-Déclaration de Conformité



Wir (we; nous)

R. STAHL Schaltgeräte GmbH, Am Bahnhof 30, D-74638 Waldenburg

8265/4.-...

erklären in alleiniger Verantwortung, dass das Produkt

hereby declare in our sole responsibility, that the product déclarons de notre seule responsabilité, que le produit Steuerung Control unit

Coffret de commande

mit der EG-Baumusterprüfbescheinigung:

(under; EC-Type Examination Certificate:

PTB 06 ATEX 1076 U

avec) Attestation d'examen CE de type:

auf das sich diese Erklärung bezieht, mit der/den folgenden Norm(en) oder normativen Dokumenten übereinstimmt

which is the subject of this declaration, is in conformity with the following standard(s) or normative documents

auquel cette déclaration se rapporte, est conforme aux normes ou aux documents normatifs suivants

Bestimmungen der RichtlinieTitel und/oder Nr. sowie Ausgabedatum der Normterms of the directivetitle and/or No. and date of issue of the standardprescription de la directivetitre et/ou No. ainsi que date d'émission des normes

94/9/EG: Geräte und Schutzsysteme zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen

94/9/EC: Equipment and protective systems intended for use in potentially explosive atmospheres

94/9/CE: Appareils et systèmes de protection destinés à être utilisés en atmosphères explosibles

EN 60079-0:2004

EN 60079-1:2004 EN 60079-7:2003

EN 60079-11:1999

89/336/EWG:

Elektromagnetische Verträglichkeit

89/336/EEC: Electromagnetic compatibility 89/336/CEE: Compatibilité électromagnétique

Qualitätssicherung Produktion:

Production Quality Assessment: Assurance Qualitée Production:

PTB 96 ATEX Q006-4

Kenn-Nr. der benannten Stelle / Notified Body number / N° de l'organisme de certification: 0102

Waldenburg, 14.05.2007

Ort und Datum

Place and date lieu et date

B. Limbacher
Leiter Entwicklung

i.V.

Head of Development Directeur Développement Dr. S. Jung

Leiter Qualitätsmanagement

Director Quality Management Dept. Directeur Dept. Assurance de Qualité

TXV 03/99 Papier chlorfrei



EG-Konformitätserklärung

EC-Declaration of Conformity CE-Déclaration de Conformité



Wir (we; nous)

R. STAHL Schaltgeräte GmbH, Am Bahnhof 30, D-74638 Waldenburg

8265/5.-...

erklären in alleiniger Verantwortung, dass das Produkt

hereby declare in our sole responsibility, that the product déclarons de notre seule responsabilité, que le produit

Control unit

Steuerung

Coffret de commande

mit der (under; avec)

EG-Baumusterprüfbescheinigung:

EC-Type Examination Certificate: Attestation d'examen CE de type:

PTB 06 ATEX 1077

auf das sich diese Erklärung bezieht, mit der/den folgenden Norm(en) oder normativen Dokumenten übereinstimmt

which is the subject of this declaration, is in conformity with the following standard(s) or normative documents

auquel cette déclaration se rapporte, est conforme aux normes ou aux documents normatifs suivants

Bestimmungen der Richtlinie	Titel und/oder Nr. sowie Ausgabedatum der Norm
terms of the directive	title and/or No. and date of issue of the standard
prescription de la directive	titre et/ou No. ainsi que date d'émission des normes

94/9/EG: Geräte und Schutzsysteme EN 60079-0:2004 zur bestimmungsgemäßen Verwendung in EN 60079-1:2004 explosionsgefährdeten Bereichen

94/9/EC: Equipment and protective systems EN 60079-7:2003 intended for use in potentially explosive EN 60079-11:1999 atmospheres 94/9/CE: Appareils et systèmes de protection EN 61241-0:2004

destinés à être utilisés en atmosphères explosibles

EN 61241-1:2004

89/336/EWG:

Elektromagnetische Verträglichkeit 89/336/EEC: Electromagnetic compatibility 89/336/CEE: Compatibilité électromagnétique

Qualitätssicherung Produktion:

Production Quality Assessment:

PTB 96 ATEX Q006-4

Assurance Qualitée Production:

Kenn-Nr. der benannten Stelle / Notified Body number / N° de l'organisme de certification: 0102

Waldenburg, 14.05.2007

Ort und Datum

lieu et date

B. Limbacher

Place and date

Leiter Entwicklung Head of Development Directeur Développement Dr. S. Jung

Leiter Qualitätsmanagement

Director Quality Management Dept. Directeur Dept. Assurance de Qualité

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